

REMARKS

Applicants' undersigned attorney thanks the Examiner for her comments. Applicants respectfully request reconsideration of this patent application, particularly in view of the above Amendment and the following remarks. Currently, Claims 1-6, 8-25, 27-40, and 42-48 are pending.

Amendments to the Claims

Claims 1-6, 8-25, 27-40, and 42-48 have been examined with no claims being allowed. Applicants have amended Claim 35 to clarify that the binder material is mixed throughout the fibrous absorbent material. Support for this limitation is provided throughout the specification, such as at page 13, line 16 – page 14, line 3, and at page 19, lines 1-3. No new matter has been added by this Amendment.

No additional fee is due for this Amendment because the number of independent claims remains unchanged and the total number of claims also remains unchanged.

Claim Rejections - 35 U.S.C. §103**A. Putzier in view of GB 1,231,648**

The rejection of Claims 1, 3-6, 8, 10-11, 16, 19-21, 23, 24-25, 27, 29, and 30 under 35 U.S.C. §103(a) as obvious over Putzier (U.S. Patent No. 5,262,218) in view of Great Britain Patent No. 1,231,648 (hereinafter "GB '648") is respectfully traversed.

Putzier discloses an absorbent material that is decomposable under biological conditions. The absorbent material includes a wrapper of a formed-fabric-type material made of an organic polymer. The wrapper is wrapped around an absorbing body with a tissue layer between the absorbing body and the wrapper. A binder may be applied to the wrapper to stabilize the wrapper. Putzier describes the relationship between the binder and the wrapper as follows:

In another preferred embodiment of the invention, the wrapper or coverstock (1) is arranged in such a way that the absorbent material is

completely enclosed. By means of a suitable binder this structure is stabilized in such a way that the material of the absorbing body, i.e., the “fluff” (cellulose) and/or the absorbent for aqueous liquids, cannot escape. This embodiment is considered to be especially advantageous, because the above-mentioned arrangement prevents components of the absorbent material according to the invention from escaping from the overall structure before, during or after use, thereby reducing the practical value of the material. (Col. 5, lines 11-22).

Thus, it appears that Putzier merely discloses the use of a binder to secure the wrapper in place around the absorbing body to create an *overall stabilized absorbent structure*. In contrast, Applicants’ description of stabilization refers to the *stability of the wrapper per se*, such that the binder material is mixed throughout the fibrous absorbent material, thereby creating a stabilized wrapper.

A mixture of the binder material throughout the absorbent material, as in Applicants’ invention, balances the absorbent properties and the mechanical integrity of a wrapper. In contrast, a wrapper having all of the binder material concentrated on one side or surface of the wrap, as in Putzier, would probably form a fairly strong binder network that would have good mechanical integrity, at least for the depth of the binder in the wrap, but such a concentrated binder configuration would likely lead to poor absorbency properties, particularly poor liquid intake. More particularly, the binder concentration of Putzier would likely create barrier properties on the surface of the wrap.

There is no suggestion or motivation in Putzier to mix the binder material throughout the wrapper because the sole purpose of the binder material in Putzier is to secure the wrapper around the absorbing body (3). Consequently, Putzier requires a very minor amount of binder material. Also, there is a separate tissue layer (2) within the absorbent material that serves the purpose of maintaining the absorbing body in place and distributing the liquid to be absorbed. Absent impermissible hindsight, it is unlikely that a person skilled in the art would consider mixing binder material throughout a fibrous absorbent material to form a wrapper, based upon the teachings of Putzier, in lieu of the wrapper, the tissue layer, and the binder material applied to a surface of the wrapper.

The Examiner suggests that since the wrapper in Putzier comprises both fibrous absorbent material and a binder material, the wrapper would inherently comprise a mixture of the two. However, as explained above, Putzier fails to disclose or suggest any balance between the fibrous absorbent material and the binder material, and provides no motivation to balance these materials within the wrapper in view of Putzier's use of the binder to stabilize the overall absorbent structure, not just the wrapper.

The Examiner further asserts that it would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed from 10-60 weight percent binder in the absorbent material of Putzier, based on GB '648, motivated by the expectation that this would form a sufficiently strong product.

GB '648 discloses an absorbent layer of biodegradable fibers held together with a water-insoluble copolymer. The absorbent layer is stable to fluid bodily discharges, but degrades to release the fibers in more alkaline liquids. GB '648 discloses a single-layer absorbent material and fails to disclose or suggest any sort of wrap material. Instead, GB '648 discloses that non-irritating binders may be applied to biodegradable fibers that are incorporated into absorbent articles such as diapers in order to enhance the strength of the flushable absorbent articles. Thus, the material of GB '648 is intended for use as a flushable absorbent core. There is no suggestion in GB '648 to use the absorbent material in any capacity other than as an absorbent core.

The reason that the absorbent material in GB '648 requires strengthening is that the absorbent material is primarily composed of biodegradable fibers that lack the strength of conventional fibers under wet conditions. Since GB '648 fails to disclose or suggest a tissue layer or wrap material, GB '648 also fails to disclose or suggest strengthening a tissue layer or any other wrapper-type component. Consequently, there is no suggestion or motivation to strengthen the wrapper material of Putzier, and thus, no suggestion or motivation to combine the teachings of Putzier and GB '648.

To establish a prima facie case of obviousness, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on Applicants' disclosure. Because the binder material in GB '648 is specifically intended to strengthen core material, there is no suggestion or motivation to apply the binder material of GB '648 to the wrapper material in Putzier. Even if these references were combined, there is no reason that a person skilled in the art would consider using a binder material to reinforce the wrapper material of Putzier based on the teachings of GB '648.

For at least the reasons given above, Applicants respectfully submit that the teachings of Putzier in view of GB '648 fail to disclose or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

B. Everett et al. in view of GB 1,231,648

The rejection of Claims 1-14 and 16-33 under 35 U.S.C. §103(a) as being unpatentable over Everett et al. (PCT Publication No. WO 99/17695) in view of Great Britain Patent No. 1,231,648 (hereinafter "GB '648") is respectfully traversed.

Everett et al. disclose a multi-layer absorbent article. A wrap sheet may be wrapped around one or more absorbent layers. The wrap sheet may be a layer of absorbent material, such as absorbent tissue. However, as pointed out by the Examiner, Everett et al. fail to disclose or suggest a wrap sheet that includes a binder material, much less a binder material that is mixed throughout a fibrous absorbent material.

GB '648 discloses an absorbent layer of biodegradable fibers held together with a water-insoluble copolymer. The absorbent layer is stable to fluid bodily discharges, but degrades to release the fibers in more alkaline liquids. More particularly, a non-irritating binder is applied to biodegradable fibers that are incorporated into absorbent articles such as diapers in order to enhance the strength of the flushable absorbent articles. Thus, the material of GB '648 is intended for use as a flushable absorbent core. GB '648 discloses a single-layer absorbent material and fails to disclose or suggest any sort of wrap material.

The Examiner states that the absorbent materials in GB '648 are, in fact, tissue because a tissue is essentially fibers held together with a binder. Nevertheless, GB '648 does not disclose or suggest the use of these absorbent materials as wrap materials, or as materials sufficiently thin for wrapping about another material, but instead discloses this combination of fibers and binder as an absorbent core type material.

The Examiner suggests that it would have been obvious to have employed a binder as taught by GB '648 with the wrapper of Everett et al. The Examiner further suggests that a motivation for combining the binder of GB '648 with the wrapper of Everett et al. is that the binder would enhance the strength of the tissue which is wrapped around the absorbent core of Everett et al. However, it is unlikely that a person skilled in the art would be motivated to modify the composition of a wrap material in one reference based on the composition of an absorbent core material in another reference, particularly when there is no suggestion that the materials in the respective wrap materials and absorbent core materials are interchangeable.

Furthermore, the reason that the absorbent material in GB '648 requires strengthening is that the absorbent material is primarily composed of biodegradable fibers that lack the strength of conventional fibers under wet conditions. There is no suggestion in Everett et al. to form a wrapper of biodegradable fibers. Consequently, there is no suggestion or motivation to strengthen the wrapper material of Everett et al., and thus, no suggestion or motivation to combine the teachings of Everett et al. and GB '648.

Because the binder material in GB '648 is specifically intended to strengthen biodegradable fibers, and because the wrapper material in Everett et al. does not include biodegradable fibers, there is no suggestion or motivation to apply the binder material of GB '648 to the wrapper material in Everett et al. Even if these references were combined, there is no reason that a person skilled in the art would consider using a binder material to reinforce the wrapper material of Everett et al. based on the teachings of GB '648.

For at least the reasons given above, Applicants respectfully submit that the teachings of Everett et al. in view of GB '648 fail to disclose or suggest

Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

C. Everett et al. in view of GB 1,231,648 and further in view of Rosch et al.

The rejection of Claims 15, 34, and 35-48 under 35 U.S.C. §103(a) as being unpatentable over Everett et al. in view of GB '648 as applied to Claims 1-14 and 16-33 above, and further in view of Rosch et al. (U.S. Patent No. 6,009,558), is respectfully traversed.

Rosch et al. disclose absorbent swimwear garments. The Examiner suggests that it would have been obvious to have incorporated an absorbent core as taught by Everett et al. into the swimwear of Rosch et al., motivated by the excellent liquid absorbent and holding properties of the absorbent core of Everett et al. However, as explained above, because the binder material in GB '648 is specifically intended to strengthen biodegradable fibers of an absorbent core, and because the wrapper material in Everett et al. does not include biodegradable fibers, there is no suggestion or motivation to apply the binder material of GB '648 to the wrapper material in Everett et al. Thus, even if the absorbent core of Everett et al. were incorporated into the swimwear of Rosch et al., the absorbent core would lack binder material in the wrapper because there is no suggestion or motivation to apply the binder material of GB '649 to the wrapper material in Everett et al.

For at least the reasons given above, Applicants respectfully submit that the teachings of Everett et al. in view of GB '648 and further in view of Rosch et al. fail to disclose or suggest Applicants' claimed invention. Accordingly, reconsideration and withdrawal of this rejection is respectfully requested.

Conclusion

Applicants intend to be fully responsive to the outstanding Office Action. If the Examiner detects any issue which the Examiner believes Applicants have not addressed in this response, Applicants' undersigned attorney requests a telephone interview with the Examiner.

Applicants sincerely believe that this Patent Application is now in condition for allowance and, thus, respectfully request early allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Melanie I. Rauch', written in a cursive style.

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